

I am indebted to the National Museum officers for the loan of a series of *Salpinctes*.

## MEASUREMENTS.

	Length.	Wing.	Tail.	Tarsus.	Culmen.	Bill from Nostril.	Depth of bill at Nostril.
Average of 8 specimens <i>S. o. pulverius</i> from San Nicolas Island.	6.00	2.75	2.17	.85	.72	.57	.17
Average of 2 specimens (intermediate) from San Clemente Island.	5.93	2.71	2.09	.80	.69	.57	.16
Average of 5 specimens (intermediate) from Santa Barbara Island.	6.05	2.77	2.24	.79	.67	.54	.15
Average of 19 specimens <i>S. obsoletus</i> from the adjacent mainland of Southern California.	5.86	2.75	2.18	.78	.67	.54	.15

## A MONTH WITH THE GOLDFINCHES.

BY MARY EMILY BRUCE.

THE nesting season is nearly over and the air is full of the voices of young birds before the Goldfinches begin to build. In the leisurely golden time of the year, when the fields are yellow with grain and the roadsides gay with golden-rod, the dainty pair, in love with the summer, the sunshine, and each other, plan their home. True to their careless, happy natures they neither hurry nor overwork. A suitable place is chosen, the nest is built, the eggs are laid, and the little dame sits content in the sun, while her mate fills the air with music, as high over woods and fields he takes his undulating flight in search of food. To watch a Goldfinch's home is a privilege that brightens the whole summer, and one would like to write their story with a pen dipped in sunshine.

It was late in July before I reached the farmhouse among the hills of Vermont where I was to spend my vacation, and I found the orchards near the house already full of young birds. Baby

Sapsuckers flopped about in the apple trees, young Vireos were followed here and there by anxious mothers, Catbirds uttered notes of warning by the roadsides, and infant Flycatchers and Thrushes regarded me with large inquiring eyes. A pair of belated Robins, nervous and overworked, were looking after their young ones, who were still in the nest, but for the most part family cares were over, and my only hope of watching the home life of the birds was to find a Goldfinch's nest.

In vain I searched the orchard near the house. Goldfinches flashed in and out among the branches, and sang of summer joys over my head, but they guarded well the secret of their homes. When I had nearly given up in despair, chance favored me, and I happened upon the object of my search in a maple tree in front of a neighboring farmhouse. Blessings never come singly, and just as I was rejoicing in this treasure trove the little daughter of the house pointed out another nest in the orchard. A third nest, also in a maple tree, was discovered a few days later, but this was already full of half fledged birds, and both maple tree dwellings were too high in the branches to be easily watched.

Nothing could be better suited to my purpose than the home in the orchard. The Goldfinches had chosen a tiny pear tree quite close to the house, and the nest was barely four feet from the ground. There was something very charming in the confidence they had shown their human neighbors, and the pair won my heart from the first by their gentle, trustful ways. It was a satisfaction to watch a nest for once where I was not treated like a robber and murderer. I could draw my chair quite near to the little pear tree, and the mother bird would look at me without a shadow of alarm in her bright eyes.

It was marvelous to see how quickly she recognized the voice of her mate in the Goldfinch chorus about her. Her neighbors in the maple tree might come and go, and she never stirred a feather, but a sudden quivering of the wings and a soft twittering response would announce his approach long before I could hear his voice, and as his song became audible to me, louder and more joyful grew her note of welcome. He would alight in a neighboring tree, speak to me first in a mild, questioning tone, like a pet canary talking to his mistress, and then fly down to the nest and feed his

mate. After the dainty meal was finished they would talk together for a moment before he left her for another flight into the big sunshiny world. Life in this miniature home was very sweet and harmonious, and the golden bird in the tiny tree with its treasure of a nest made a charming picture.

For the next four weeks I visited the orchard daily. They were quiet hours I spent there, but there was no lack of entertainment. For music the Field Sparrows sang to me their simple, plaintive songs, and from far up on the hills I could sometimes hear the chant of the Hermit Thrush. A pair of Chipping Sparrows in a neighboring apple tree were bringing up their only child with quite as much solicitude as if they were burdened with a large family. They were a striking contrast to the serene and happy Goldfinches, but, plain little brown folks as they were, I enjoyed watching them. Sometimes young Warblers, looking strangely unlike their parents, visited the orchard, or a bevy of Crows from a maple grove near by, disturbed by a passing Hawk, startled me out of my day dreams. I wondered if the little Goldfinch had as many resources as I, or if the hours seemed long to her. Perhaps she too dreamed day dreams and listened to the music of nature. She seldom left the nest, though I occasionally startled her off by some sudden movement, when she reproached me for my carelessness in the sweetest of voices.

When I first looked into the nest there were six eggs, white, with faintest tinge of blue, and pretty enough to satisfy any bird mother, but my little girl friend had told me that there were but two eggs laid when the bird began to sit, and I was curious to know whether there would not be a marked difference in the age of the young ones. After two week's patient waiting the little mother and I were rewarded by finding among the pretty eggs a very ugly birdling. On my afternoon visit there were three little birds, the next day four, and on the day following I counted five heads. By this time the mother did not sit constantly on the nest, but cunningly tucked the remaining egg under the little birds and went on short excursions into the country. Whether the young ones did not do their duty, or whether it was another instance of the survival of the fittest I cannot tell, but when the oldest nestling was five days old I again counted heads

and there were only four. The youngest child and the sixth egg had both disappeared, and I decided that in the struggle for existence the older birds must have had too great an advantage in point of time. As it was, the nest seemed hardly large enough, and the four had a comical fashion of lying with their long necks stretched out and their heads hanging over the edge, their eyes half closed and their mouths wide open as if gasping for air. Certainly uglier birdlings never gladdened the hearts of deluded parents.

For the first week they showed little intelligence. At the noise of a passing wagon four mouths would open as quickly as at the sound of the mother's voice, and they greeted me in the same ravenous manner. I responded by trying to feed them with crushed plantain seed, but though they opened their bills to receive the morsel, the experiment was not very successful. It would take the eye of faith to see in these atoms of birdhood the potential grace and beauty of a mature Goldfinch, and I sometimes fancied that the mother herself had doubts about them, for she would stand pensively on the edge of the nest in her visits to the home tree and look unutterable things. The little birds were fed very slowly and thoroughly about once an hour, sometimes by the father, sometimes by the mother. Possibly the parents came oftener during my absence, but from the time the sitting was over I saw them less and less frequently, though I was sometimes greeted on my arrival by a note of inquiry from the tree tops. I hope I proved myself worthy of the confidence placed in me. I did not sit too near the nest, and by moving quietly and speaking softly I tried, in my poor human fashion, to become a fit associate for my gentle friends. Though so seldom fed, the little ones seemed to thrive on fresh air and sunshine. Stretching matches and other gymnastics were practised daily, pretty feathers gradually appeared, and by the time they were ten days old they were bonny birdlings resembling their mother. From her they had inherited gentle manners and soft voices, for it was at that early age that they began to talk. They no longer mistook me for a parent bird, but seemed fond of me, trying to swallow the bits of hard-boiled egg I offered them, and showing no fear when I took them out of the nest.

When they were nearly two weeks old I visited the orchard

every morning before breakfast, expecting each day to find my birdlings flown, but it was not until the sixteenth day that the event occurred for which I had been waiting.

On this morning I was more grieved than surprised to find only two little birds left in the nest. I spent the entire morning in the orchard, waiting to see the remaining birdlings take flight. It seemed to be the policy of the parents to induce them to come out for something to eat, for they were not once fed during this time. I offered them morsels of egg, but they paid little heed to me. They were restless, and I saw that the old home and old friends had lost all charm for them. Suddenly while I watched, one of the two birdlings scrambled onto the edge of the nest, balanced himself for a moment, and then flew straight into the nearest apple tree. From this vantage ground he looked down into the tiny pear tree home that had once seemed all the world to him, and called back to his little brother that he had found a larger and greener world than that. The baby in the nest seemed half inclined to follow him, but at each attempt after much fluttering of the wings he would slip back into the old place. Presently the mother came with a morsel of food for the brave little bird in the tree, but no attention was paid to the pleading cry of his lazy brother, and very soon the venturesome young one found the use of his wings so pleasant and the food she offered him so tempting that he followed her across the orchard into the fields beyond.

On my afternoon visit the poor little coward was still in the nest, apparently very hungry and teasing incessantly. He may have thought that he was forgotten, — and I confess that I had fears of this myself, — when late in the afternoon, brighter than a gleam of sunshine, doubtless, to the waiting bird, came the father to the nest. Only this encouragement was needed, the little fellow was not to be left alone again; in a moment he was standing on a tiny twig above the nest, there was another moment of balancing and indecision, and then taking heart he too flew across to the friendly apple tree. He was rewarded by the instant appearance of his mother who had doubtless waited for this evidence of courage on the part of her youngest darling. She first gave him a hearty meal, and then flew from tree to tree towards the fields beyond. My birdling followed her in pretty, undulating, Goldfinch fashion, and I was left alone in the orchard.